REMARKS/ARGUMENTS

Claims have been amended to further clarify that a Virtual Machine Bytecode instruction determines a string representation for an object, thereby allowing the string representation to be determined without invoking a method call. It is respectfully submitted that the cited art does NOT teach or suggest a Virtual Machine Bytecode instruction determines a string representation for an object.

In the Final Office Action, the Examiner has rejected claims 4, 5, 7, 8, 11-15 and 17-22 under 35 U.S.C. § 103(a) as being unpatentable over *Peter van der Linden* in view of US Patent No. 6,654,778 (*Blandy et al.*) and further in view of US Patent No. 6,026,485 (*O'Conner et al.*)

The Examiner has asserted that *Linden* discloses retrieving a string representation associated with a Java object, thereby allowing said string representation to be determined. Applicant respectfully notes that Linden neither discloses nor suggests using a Java Bytecode instruction for retrieving a string representation associated with a Java object, thereby allowing said string representation to be determined without invoking a Java method.

In the Office Action, The Examiner has also stated that "*Blandy* discloses a Java bytecode instruction suitable for execution by a Java virtual machine in a Java computing environment that operates to have the functions performed by a Java method without invoking said Java method." Applicant respectfully submits that *Blandy* discloses that an "interpreter is directed by the Bytecode to execute native code to perform the function indicated by the Bytecode" (*Blandy*, col. 5, lines 65-67), and further states that "methods having eight or fewer Bytecodes are considered potential trivial methods that may be replaced with native code, which performs the function of the method"

(Blandy, col. 6, lines 42-45). In other words, Blandy replaces methods with native code. It is respectfully submitted, however, that Blandy neither discloses nor suggests a Bytecode instruction that can retrieve a string representation associated with a Java object.

The Examiner has rejected claims 6 and 8-19 under 35 U.S.C. § 103(a) as being unpatentable over Linden and Blandy as applied to Claims 1,3,4,5 and/or 7, and further in view of O'Connor et al. (US Patent No 6,026,485). The Examiner stated in pertinent part that it would have been obvious to retrieve the string representation of an object as taught by Linden without invoking a Java method in Java Virtual Machine as taught by Blandy through the conventional use of a Java Virtual Machine as taught by O'Connor. The motivation for doing so would have been because the Java virtual machine is a stack-oriented abstract computing machine, where instructions operate on data at the top of an operand stack and it is of conventional practice to use the Java Virtual Machine in this way as suggested by O'Connor. Applicant respectfully notes that as mentioned in above, Linden and Blandy neither disclose nor suggest using a Java Bytecode instruction for retrieving a string representation associated with a Java object, thereby allowing said string representation to be determined without invoking a Java method. In this regard, it is respectfully submitted that viewing the Java Virtual Machine as an abstract stack-oriented machine does not render the invention as claimed in Claims 6 and 8-19 obvious over the cited art. Similarly, it is respectfully submitted that O'Connor's teaching of a Java Aload instruction (as pointed out by the Examiner) for loading references does not render the invention as claimed in the pending Claims obvious over the cited art because an Aload does not teach or even remotely suggest retrieve a string representation associated with a Java object. Rather, the Aload operation loads a

reference on the stack.

Based on the foregoing, it is submitted that the claims are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed because the limitations discussed above are sufficient to distinguish the claimed invention from the cited art. Accordingly, Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 500388 (Order No. SUN1P843). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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